

Takasi TUYAMA*: A new species of Orchidaceae,
Oreorchis porphyranthes from Nepal

津山 尚*: ヒマラヤ産ラン科の一新種 *Oreorchis porphyranthes*

Three sheets of Orchidaceous specimens deposited in the British Museum and determined as *Oreorchis foliosa* Lindl. were found by Dr. H. Hara to be doubtful in regard to their identification. Accordingly he made a loan agreement with the authority of the Museum to leave them in the author's hands for further investigation in Tokyo. The author carefully compared the specimen with those of unmistakable *Oreorchis foliosa* which was also sent on loan from the same place along with the fruiting specimen collected in Nepal by the Tokyo University Party and determined as such by the author. The specimen in question consists of three collections, that is to say South of Gurjakhani, alt. 10300 ft., Tukucha, Kali Gandaki, 12000 ft., and Babze Khola, alt. 12500 ft. respectively. Through several decades, numerous mountaineers and scientists from many countries have been lured to these parts of the Himalayan region where the great mountain ranges such as Dhaulagiri, Annapurna and Manaslu are soaring above the clouds. None of them, however, have ever brought back this orchid except for the three English collectors who are cited below the Latin diagnosis.

After the careful investigation of these specimens and the literature concerned, the author came to the conclusion that these specimens should represent a new species of the genus *Oreorchis* distinguished by its exceedingly stout scape and large and beautiful flowers. The newly given specific name is due to the colour of the flower.

The genus *Oreorchis* comprises a dozen or more species distributed from temperate Himalaya to the subcontinent of China (incl. Tibet, Manchuria), Formosa, Korean Peninsula and Japan proper, extending north to Kuril Islands, Kamtchatka and East Siberia. In the Author's mind, this new species finds its allies in the Himalayan belt. They are *O. indica*

* Department of Biology, Faculty of Science, Ochanomizu University, Ohtsuka, Tokyo. お茶の水女子大学理学部生物学教室.



Fig. 1. *Oreorchis porphyranthes* Tuyama, sp. nov. A. Type specimen in BM. B. A part of specimen from Babze Khola collection. Scales in centimeter.

Hook. f. and above-mentioned *O. foliosa* Lindl. The latter is apparently distinguished from the new species by the slender and many-flowered spike and narrower leaves thin in texture. In addition, its tepals are all tapering to the apices, and equal to or less than 13 mm in length. In this new species, instead, they are about 17 mm long with the apices acute or obtusely acute. According to Sir J. D. Hooker, (Fl. Brit. Ind. 5: 709, 1890), the flower of *O. foliosa* is 1/2 inch long and red-brown with the very obscure median keel on the lip. The author have not yet examined the type specimen of *O. indica* Hook. f. According to the author of the species the lateral sepals and petals are subfalcately lanceolate and in a same manner oblong respectively, and the lip is provided with a raised median lamella between the lateral lobes. He says that this species has the flower much larger than that of *O. foliosa*, but actually he gives the same measure of 1/2 inch to its sepals. Again concerning *O. foliosa*, King and Pantling show by their plate (Ann. Roy. Bot. Gard. Calcutta, 8: t. 137, 1898) that the sepals and petals are basically yellow streaked with reddish brown, while the lip is pinkish spotted with reddish brown and nerved with the paler colour.

In conclusion, the distinguishing characters of this new one from the other species of the genus are: 1) large and fleshy flowers coloured with deep purple, the lip being much paler; 2) much shorter lip compared with the other perianth lobes, and the disk provided with a couple of thin lamellae between the median and the nearest lateral veins; 3) thick chartaceous foliage leaves that is not tapering to the apices; 4) bulbs often being amply spaced on the rhizome.

Prof. Emer. Hiroshi Hara, one of my best friends, was so kind as to select these sheets of specimens out of a vast number of Himalayan orchid collections which are deposited at the British Museum for my study. Most hearty thankfulness is due to him. The author also wishes to express his sincere thanks to the authorities of the British Museum (Natural History) who kindly sent the specimens concerned on loan to the University of Tokyo. As the curator of the Herbarium, the University Museum, University of Tokyo, Dr. Hiroyoshi Ohashi gave every convenience to the author for study of this orchid. The junior botanists, Mr. Hideaki Ohba and Mr. Yoichi Tateishi together with the technical assistant, Mrs. Kimie Mori have assisted the author in many respects with their intelligence and labour. The

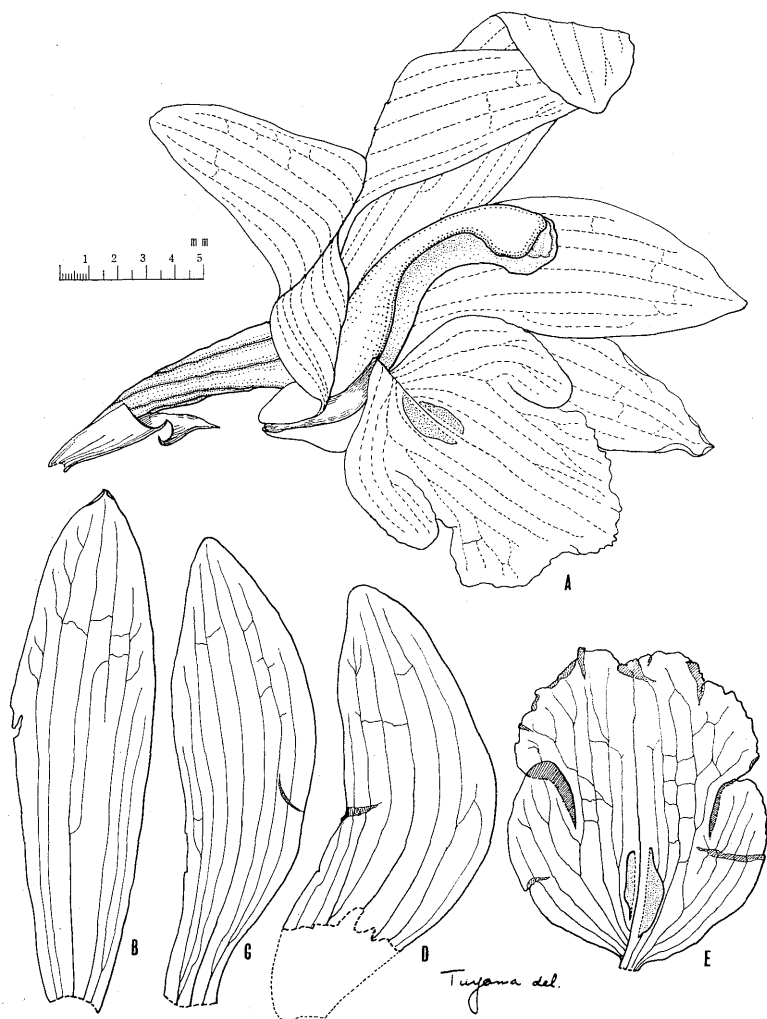


Fig. 2. *Oreorchis porphyranthes* Tuyama, sp. nov. A. Flower with the floral bract halfway broken. B. Dorsal sepal. C. Petal. D. Lateral sepal. E. Labellum. All from a moistened flower of the type sheet. B, C, D, and E are flattened out; with the veins and veinlets faithfully traced. In D basal portion was broken at dissection. In E, basal calli are pressed outwardly.

author offers his deep sense of gratitude to all of them.

Oreorchis porphyranthes Tuyama, sp. nov.

Planta terrestris, ad 14.5–33.5 cm alta. Folium caulem singulatim edens. Pseudobulbus subepigaeus vel subterraneus, ovoideus vel rarius cylindraceus ca. 0.7–1.8 cm crassus, saepe folii basi obsoletis obtectus, etiam rarius (ubi is remote dispositis) rhizomate satis longe repente tereti ca. 1.5 mm crasso praedito. Folia crasse chartacea ca. 7–16 cm longa 0.9–1.8 cm lata cum petiolis brevibus, laminis late lanceolatis gradatim apice attenuatis, textura in sicco crasse chartaceis et rigidisque, secus marginem et nervos principales celluloso-papulosi, basi attenuatis et in petiolos leviter conduplicatim transeuntibus. Scapus erectus crasse strictus infra medium vaginis (2–3 in numero) anguste cylindraceis inter sese remotis, laxe amplexantibus 3.0–4.4 cm longis obtegens ore leviter obliquis (in statu explanato) 3–4 mm latis. Rachis florifera ca. 2.0–6.2 cm alta laxa 2–5-flora. Flores arcuato-patentes carnosuli satis variabiles in magnitudine. Bractae floriferae erecto-patentes, in floribus superioribus plerumque squamiformes sed infima saepe subfoliaceae ad 1.2 cm longae ovarium superantes. Pedicellus crassiusculus ovario sensim continuans, ovario sub anthesi (cum pedicellis) 0.8–1.3 cm longo (in statu explanato) apice ca. 2–3 mm lato. Flores omnino atropurpurei sed labellis pallide rosei (ex collectoribus). Sepala dorsalia lineari-oblonga apice acuta dorso leviter convexa ca. 18 mm longa 4.5 mm lata sub-7-nervata. Sepala lateralia dorsales latiora et breviora, anguste oblonga apice obtuso-acuta dorso similariter convexa ca. 15 mm longa 5 mm lata 7-nervata. Petala oblanceolata certe inaequalia apice subacuta ca. 16 mm longa supra medium ca. 4.8 mm lata sub-7-nervata. Labellum breviter ovato-oblongum ca. 11 cm longum 9 mm latum trilobatum multinervatum, lobo intermedio transverse oblongo apice irregulariter undululato basi subito angustato, lobis lateralibus oblique oblongis leviter undululatis, callis binis longitudinalibus tenuibus ad basin hypochili praeditis. Columna semiteres ca. 10 mm longa anteriore arcuata, antice concava, superiore leviter alatum expansa. Capsula ignota.

Spec. exam. Central Nepal: South of Gurjakhani, alt. 10,300 ft., beneath the scrub of *Salix* in river bed, 'Flowers, outer tepals glossy dark purple, labellum rosy pink' (leg. J. D. A. Stainton, W. R. Sykes & L. H. J. Williams, No. 3048, Jun. 7, 1954—Type in BM); Tukucha, Kali Gandaki, 12,000 ft.

open grass alp, 'Flowers purple with mauve tangle' (leg. Stainton, Sykes & Williams, No. 1172, Jun. 16, 1954, BM); Babze Khola, alt. 12,500 ft., damp shady birch woods, 'Sepals and petals dull purple, lip pale mauve spotted and edged with lilac, spur and rostrum reddish yellow (leg. D. G. Lowndes, No. 1014, Jun. 15, 1950, BM).

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1974 年、原寛博士は British Museum に滞在研究中に、同所にある *Oreorchis foliosa* (Lindl.) Lindl. と同定されたネパール産の 3 枚の標本についてその同定に疑問をもち、これを借出して研究を小生に托した。これらはアンナプルナ山麓附近の 3,300~4,200 m の高所で英国人によって採集されたものである。

ただ 1 個の花しか解剖しなかったが、全標本にわたって精密に観察した。近縁属と云われる *Corallorrhiza* などを剖見・比較したが、本標本が *Oreorchis* に属することは間違ない。この属の中ではヒマラヤ産の上記の *O. foliosa*, および *O. indica* にやや近いが、両種はともに花冠の長さはほぼ 13 mm を超えないのに本種は背がく片が 17 mm に達し、唇弁をふくむ花被片の形、色彩、唇弁基部の 2 個の“ひだ”(calli または lamellae) の形態で明らかに区別される。新種と認めて *O. porphyranthes* Tuyama と命名した。*Oreorchis* の各種は花の形態の上での分化が外見上著しくないように見える。将来はより精密な revision が必要ないように思われる。いずれタイプ標本を見た上で、本属に関するメモを発表できるかも知れない。本属はヒマラヤ、中国(チベット、台湾、東北部を含む)、朝鮮半島、日本、東部シベリアに分布し、南方では高所に、北方では深山に生育し、その属名が意味するごとく“mountain orchids”である。12~13 種が知られている。日本産のコケイラン、*O. patens* (Lindl.) Lindl. とヒマラヤ産の *O. micrantha* Lindl. との差異については東大で出版された *The Flora of Eastern Himalaya, Second Report 1971* に述べておいた。

本新種は属の中で最大の花を有し、花は暗紫色で、唇弁は淡ローズ色(採集ノートによる)である。